IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION

VELOS MEDIA, LLC, **Plaintiff,** v. **BYTEDANCE LTD., BYTEDANCE PTE. LTD., BYTEDANCE INC., BYTEDANCE TECHNOLOGY LTD., TIKTOK LTD., TIKTOK PTE. LTD., AND TIKTOK, INC.,** **Defendants.**	**Civil Action No. 1:25-cv-00967** **JURY TRIAL DEMANDED**

ORIGINAL COMPLAINT

Plaintiff Velos Media, LLC ("Velos" or "Plaintiff") files this Original Complaint against ByteDance Ltd., ByteDance Pte. Ltd., ByteDance Inc., ByteDance Technology Ltd., TikTok Ltd., TikTok Pte. Ltd., and TikTok, Inc. (collectively, "TikTok" or "Defendants") and alleges as follows:

NATURE OF THE ACTION

1.   Velos owns and licenses a curated portfolio of more than 450 global assets, many of which have claims that are essential to one or more video decoding standards. Velos has been licensing HEVC-related patents since 2017 and has worked to develop an extremely high-quality portfolio. The H.265 Standard is one of the most widely used video decoding standards in the world. Velos' patents also include claims relating to encoding video, though the H.265 Standard does not specify an encoding process.

2.   Encoding and decoding video is a critical aspect of TikTok's business model, which is predicated entirely on users uploading video content to TikTok servers, where the video can be

1

transcoded, stored, and later streamed by TikTok's more than 1.2 billion daily active users. In offering these services, TikTok infringes Velos's patents, which significantly contribute to the efficiency, reliability, and quality of TikTok's platform.

3.   Velos attempted to open licensing negotiations with TikTok by first negotiating in good faith to fair terms in a mutual non-disclosure agreement. TikTok demanded unreasonable terms and thus the parties were unable to reach agreement. On information and belief, TikTok has also received a RAND offer for a license to Velos' video patents but remains unlicensed. TikTok's failure to negotiate in good faith to reach an agreement on terms for a license to Velos' patents (including Velos' patented H.265 technologies) has forced Velos to institute this lawsuit.

THE PARTIES

4.   Plaintiff Velos Media, LLC is a corporation organized under the laws of Delaware, with its principal place of business at 4143 Maple Ave., Suite 130, Dallas, Texas 75129. Velos is the sole owner by assignment of all right, title, and interest in U.S. Patent Nos. 11,627,338, 9,008,184, 12,186,395, 8,964,849, 12,088,843, and 12,341,962 (the "Asserted Patents").

5.   On information and belief, Defendant ByteDance Ltd. is a foreign corporation organized under the laws of the Cayman Islands with a principal place of business at P.O. Box 31119, Grand Pavilion, Hibiscus Way, 802 West Bay Road, Grand Cayman, KY1-1205, Cayman Islands.

6.   On information and belief, Defendant ByteDance Pte. Ltd. is a foreign corporation organized under the laws of Singapore with a principal place at 1 Raffles Quay, #26-10, Singapore, 048583.

7.   On information and belief, ByteDance Inc. is a corporation organized under the laws of the Delaware with a principal place of business at 250 Bryant Street, Mountain View, California 94041. On information and belief, Defendant ByteDance Inc. has an active registration

for a Texas Franchise Tax Account, which provides it the right to transact business in Texas. On

further information and belief, Defendant ByteDance Inc.'s registered agent for service of process

in the State of Texas is the Corporation Service Company d/b/a CSC-Lawyers Incorporating

Service Company, 211 East 7th Street, Suite 600, Austin, Texas 78701.

8.   On information and belief, ByteDance Technology Ltd. is a foreign corporation

organized under the laws of the Cayman Islands with a principal place of business at P.O. Box

31119, Grand Pavilion, Hibiscus Way, 802 West Bay Road, Grand Cayman, KY1-1205, Cayman

Islands.

9.   On information and belief, Defendant TikTok Ltd. is a foreign corporation

organized under the laws of the Cayman Islands with a principal place of business at P.O. Box

31119, Grand Pavilion, Hibiscus Way, 802 West Bay Road, Grand Cayman, KY1-1205, Cayman

Islands.

10.   On information and belief, Defendant TikTok Pte. Ltd. is a foreign corporation

organized under the laws of Singapore with a principal place at 1 Raffles Quay, #26-10, Singapore,

048583.

11.   On information and belief, Defendant TikTok Inc. is a California corporation with

its headquarters at 5800 Bristol Parkway, Suite 100, Culver City, CA 90230 and an office at 300

Colorado Street, Austin, Texas 78701. On information and belief, Defendant TikTok Inc. has an

active registration for a Texas Franchise Tax Account, which provides it the right to transact

business in Texas. On further information and belief, Defendant TikTok Inc.'s registered agent for

service of process in the State of Texas is the Corporation Service Company d/b/a CSC-Lawyers

Incorporating Service Company, 211 East 7th Street, Suite 600, Austin, Texas 78701.

12.   On information and belief, Defendant ByteDance Ltd. is the ultimate parent company of Defendants ByteDance Pte. Ltd., ByteDance, Inc., ByteDance Technology Ltd., TikTok Ltd., TikTok Pte. Ltd., and TikTok, Inc.

THE DEFENDANTS' ACCUSED INSTRUMENTALITIES

13.   The Defendants offer the video platform "TikTok." For example, the Defendants offer, distribute, and encourage users to download and use the TikTok application through which users can access the TikTok video platform. On information and belief, the TikTok application contains encoders and decoders with which TikTok users encode and decode video.

14.   TikTok users upload videos to TikTok's servers. TikTok's transcoders are used, for example, in decoding uploaded video and re-encoding or encoding video for distribution and consumption by TikTok users.

15.   TikTok's decoders (including, for example, those in the TikTok application and those on TikTok servers) that decode video according to the H.265 Standard and TikTok's encoders (including, for example, those in the TikTok application and those on TikTok servers) that encode video into H.265-compliant formats infringe the Asserted Patents. Collectively, these are referred to as the Accused Instrumentalities.

JURISDICTION AND VENUE

16.   This Court has exclusive subject matter jurisdiction over the patent infringement claims in this case under 28 U.S.C. §§ 1331 and 1338.

17.   This Court has supplemental jurisdiction over all claims other than the patent infringement claims in this case under 28 U.S.C. § 1367, 2201, and 2202.

18.   An actual controversy over all claims exists between the parties to this case.

19.   This Court has personal jurisdiction over Defendants because they have, directly and/or through agents and/or intermediaries, committed acts and continue to commit acts of patent

infringement, including within Texas, giving rise to this action and have established minimum contacts with Texas such that the exercise of jurisdiction would not offend traditional notions of fair play and substantial justice. Defendants, directly and/or indirectly at least through agents and intermediaries, have committed and continue to commit acts of infringement in this District by, among other things, making, using, selling, offering to sell, and importing the Accused Instrumentalities.

20.   On information and belief, Defendants regularly conduct business in Texas, including in this District, and purposefully avail themselves of the privileges of conducting business in Texas and this District. In particular, on information and belief, Defendants, and/or their agents and/or intermediaries, make, use, import, offer for sale, sell, and/or advertise their products and affiliated services in Texas and this District, including but not limited to the Accused Instrumentalities, sufficient to give rise to jurisdiction. On information and belief, Defendants have placed and continue to place Accused Instrumentalities into the stream of commerce, via an established distribution channel, with the knowledge and/or understanding that such products are sold in the United States, including in Texas, and specifically including in this District.

21.   On information and belief, Defendants derive substantial revenue from the sale of Accused Instrumentalities distributed within Texas, including within this District, and/or expect or should reasonably expect their actions to have consequences in Texas. In addition, on information and belief, Defendants knowingly induce, and continue to knowingly induce, infringement of the Asserted Patents within Texas and within this District by offering for sale, selling, and/or contracting with others to market Accused Instrumentalities with the intent to facilitate infringing use by others and by creating and/or disseminating product information and other materials providing instruction for infringing use.

22.   Defendants' infringing activity has led to foreseeable harm and injury to Velos.

23.   Venue is proper under 28 U.S.C. § 1391 and 28 U.S.C. § 1400(b). Foreign Defendants ByteDance Ltd., ByteDance Pte. Ltd., ByteDance Technology Ltd., TikTok Ltd., and TikTok Pte. Ltd. do not reside in the United States, and thus venue is appropriate in this District under 28 U.S.C. § 1391(c)(3). In addition to the facts set forth above, Defendant TikTok, Inc. has committed acts of infringement in this District and have a regular and established place of business in this District at least through regularly conducting business at least through its office located in this District at Austin, Texas, the millions of users of the Accused Instrumentalities within the State of Texas, many of whom reside in this District, and as well as maintaining active registrations for Texas Franchise Tax Accounts.

24.   Over the last few years, TikTok has repeatedly emphasized its ties to Texas. On its website TikTok states that "the central feature of Project Texas is our work with Oracle to isolate the TikTok services serving U.S. users within Oracle's U.S. cloud environment as an additional safeguard."[1]

25.   Appearing before Congress on March 23, 2023, TikTok's CEO, Shou Zi Chew, testified under oath about Project Texas and TikTok's efforts to store data—including user video—in the United States. Mr. Chew also testified that "The bottom line is this: American data stored on American soil by an American company overseen by American personnel. We call this initiative Project Texas. That is where Oracle is headquartered. Today U.S. TikTok data is stored, by default, in Oracle's servers."[2] Throughout his congressional. testimony, Mr. Chew referred to "Texas" or "Project Texas" dozens of times.

---

[1] https://usds.tiktok.com/usds-about

[2] https://www.congress.gov/118/meeting/house/115519/documents/HHRG-118-IF00-Transcript-20230323.pdf

26. On information and belief, TikTok uses Oracle servers, including Oracle Cloud Infrastructure, to store, transcode, and distribute user video content for the TikTok platform.

27. On information and belief, Oracle, which is headquartered in Austin, Texas, employs Texas residents who develop and maintain Oracle servers and Oracle Cloud Infrastructure that is used by TikTok to store, transcode, and distribute user video content for the TikTok platform.

VELOS' INVESTMENTS IN VIDEO INNOVATIONS

28. Velos owns patents that constitute significant contributions to video technologies that enable many features that are commonplace and expected of today's video services, social media, and consumer electronics.

29. Over the last few decades, internet traffic has evolved from simple, text-based interfaces to a plethora of media, including video. As technology has evolved, the importance and use of video has skyrocketed. Video coding technologies, including the H.265 Standard, are crucial to the development and evolution of modern communication, particularly as video traffic, including social media video traffic, has become an increasingly outsized share of total consumer Internet traffic.

30. The Joint Collaborative Team on Video Coding ("JCT-VC") developed the H.265 Standard. The inventors of the Asserted Patents provided significant contributions to JCT-VC while employed by Sharp Corporation and Research in Motion Limited (now BlackBerry). Several of these contributions are related to claims of the Asserted Patents.

31. The H.265 Standard published as ITU-T Recommendation H.265 High Efficiency Video Coding and enables consumers to decode higher quality video with less bandwidth. The H.265 Standard is one of the most prevalent video decoding standards in the world.

32.   Velos has made significant investments in video technology since 2017 and has many patents related to video coding technologies. These investments include patents, including some of the Asserted Patents, with claims essential to the H.265 Standard.

COMPLIANCE WITH THE ITU COMMON PATENT POLICY AND RELEVANT DECLARATIONS

A.   The ITU and the H.265 Standardization Process

33.   Certain claims of Velos' patents relate to the H.265 Standard.

34.   The ITU was formed in 1865 at the International Telegraph Convention. The ITU became a specialized agency of the United Nations in 1947, responsible for issues that concern information and communication technologies. The ITU is organized into various sectors. One sector is Telecommunication Standardization or "ITU-T." The mission of ITU-T is to produce telecommunications-related standards, which are referred to as "Recommendations."

35.   Within ITU-T, members come together and propose technological solutions for inclusion in the draft Recommendations. The goal is to draft Recommendations with the best available technology to ensure the standards are of a high quality.

36.   The contributions that are ultimately included in a Recommendation are often covered by one or more patent claims. The ITU developed the Common Patent Policy to assist with usage of patented technologies in its standards.

37.   The ITU published Guidelines for Implementation of the Common Patent Policy ("the Guidelines"). The Guidelines explain that the Common Patent Policy "was drafted in its operative part as a checklist, covering the three different cases which may arise if a Recommendation | Deliverable requires licenses for Patents to be practiced or implemented, fully or partly." [*"Guidelines for Implementation of the Common Patent Policy for ITU-*

T/ITURIISOIIEC," ITU, Rev. 4 (Dec. 16, 2022) https://www.itu.int/itudoc/itu-t/patents/policy/guide.pdf].

38.   The Common Patent Policy states:

2. If a Recommendation | Deliverable is developed and such information as referred to in paragraph 1 has been disclosed, three different situations may arise:

2.1 The patent holder is willing to negotiate licences free of charge with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T/ITU-R/ISO/IEC.

2.2 The patent holder is willing to negotiate licences with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T/ITU-R/ISO/IEC.

2.3 The patent holder is not willing to comply with the provisions of either paragraph 2.1 or paragraph 2.2; in such case, the Recommendation | Deliverable shall not include provisions depending on the patent.

3. Whatever case applies (2.1, 2.2 or 2.3), the patent holder has to provide a written statement to be filed at ITU-TSB, ITU-BR or the offices of the CEOs of ISO or IEC, respectively, using the appropriate "Patent Statement and Licensing Declaration" form. This statement must not include additional provisions, conditions, or any other exclusion clauses in excess of what is provided for each case in the corresponding boxes of the form.

[*"Common Patent Policy for ITU-TIITU-RIISOIIEC,"* ITU (2022), https://www.itu.int/en/ITU-T/ipr/Pages/policy.aspx].

39.   The ITU defines "essential" only patent claims that are essential or necessary for implementation of a specific Recommendation. The Guidelines define the term "Patent" to be "those claims contained in and identified by patents, utility models and other similar statutory rights based on inventions (including applications for any of these) solely to the extent that any such claims are essential to the implementation of a Recommendation | Deliverable. Essential patents are patents that would be required to implement a specific Recommendation | Deliverable." [*"Guidelines for Implementation of the Common Patent Policy for ITU-T/ITURIISOIIEC,"* ITU,

Rev. 4 (Dec. 16, 2022) https://www.itu.int/itudoc/itu-t/patents/policy/guide.pdf]. The definition of

"Patent" provided by the Guidelines is in the Patent Statement and Licensing Declaration Form

that is completed by patent holders who may have patent claims essential to the H.265 Standard.

The Patent Statement and Licensing Declaration Form states that identifying specific patents on

the form is optional but not required.

40.   The H.265 Recommendation specifies the implementation of decoders. *See* Ex. 1

at 5 [ITU-T H.265 Recommendation] (defining (i) "decoding process" as "[t]he process specified

in this Specification that reads a bitstream and derives decoded pictures from it" and (ii) "encoding

process" as "[a] process not specified in this Specification that produces a *bitstream* conforming

to this Specification.").

B.   Compliance with the ITU Common Patent Policy and Relevant Declarations

41.   Velos owns many patents related to video decoding technology. Many of these

innovations were voluntarily contributed to the standard-setting process at the ITU through

technical contributions. For example, the inventors of the Asserted Patents made several important

contributions during H.265 development while employed by Sharp Corporation and Research in

Motion Limited (now BlackBerry). Industry members attending the standardization meetings

chose to adopt this technology into the standards because of its benefits and merit.

42.   Consistent with the ITU Common Patent Policy, the prior owners of the Asserted

Patents timely notified standard setting participants that they may obtain patent claims on their

contributions, including by submitting Patent Statement and Licensing Declarations to the ITU in

which they declared in good faith that they are prepared to grant licenses to the essential claims of

the relevant patents on RAND terms and conditions.

43.   Velos recognizes the applicable obligations under the ITU Common Patent Policy

and is prepared to grant licenses for decoding according to the H.265 Standard to any patent claims

essential to the H.265 Standard on reasonable and non-discriminatory (RAND) terms and conditions.

C.   Velos' Negotiations with TikTok

44.   Prior to the filing of this lawsuit, licensing representatives from Velos reached out to TikTok to engage in licensing negotiations regarding Velos' portfolio of patents relevant to the H.265 Standard. Velos anticipated that these negotiations, if conducted in good faith, could result in TikTok voluntarily taking a license on RAND terms and conditions.

45.   It is common practice in the industry of licensing broad portfolios of patents for patent owners and potential licensees to execute reasonable non-disclosure agreements prior to providing confidential information to the other side in negotiations. Reasonable non-disclosure agreements facilitate open, candid discussions.

46.   But rather than execute a routine non-disclosure agreement, TikTok sought to impose onerous terms and conditions in the proposed non-disclosure agreement that were not reasonable and not acceptable to Velos. On information and belief, TikTok proposed these terms to delay or obstruct good faith negotiations.

47.   On information and belief, TikTok received an offer to take a license that would cover the Velos' video coding patents, including the Asserted Patents, on RAND terms and conditions.

48.   TikTok remains unlicensed to Velos' patents.

THE ASSERTED PATENTS

49.   Velos complied with any applicable marking requirements under 35 U.S.C. § 287(a) at least because the asserted method claims do not require marking and/or there is nothing to mark.

A.   U.S. Patent No. 11,627,338 ("the '338 Patent")

50.   The '338 Patent, entitled "Significance map encoding and decoding using partition selection," issued on April 11, 2023, to inventors Gergely Ferenc Korodi, Jinwen Zan, and Dake He. The '338 Patent issued from U.S. Patent Application No. 17/688,703, filed on March 7, 2022, which is a continuation of U.S. Patent Application No. 17/102,218, filed on November 23, 2020 (now U.S. Patent No. 11,272,210), which is a continuation of U.S. Patent Application No. 16/597,829, filed on October 9, 2019 (now U.S. Patent No. 10,848,783), which is a continuation of U.S. Patent Application No. 15/712,640, filed on September 22, 2017 (now U.S. Patent No. 10,448,052), which is a continuation of U.S. Patent Application No. 15/288,115, filed on October 7, 2016 (now U.S. Patent No. 9,774,885), which is a continuation of U.S. Patent Application No. 14/824,197, filed on August 12, 2015 (now U.S. Patent No. 9,491,486), which is a continuation of U.S. Patent Application No. 14/525,329, filed on October 28, 2014 (now U.S. Patent No. 9,143,801), which is a continuation of U.S. Patent Application No. 13/279,397, filed on October 24, 2011 (now U.S. Patent No. 8,891,630). The '338 Patent expires on October 24, 2031. A true and correct copy of the '338 Patent is attached as Exhibit 2.

51.   Modern video coding methods use a combination of predictions from already-coded image data and residual information, showing the differences between the predictions and actual pixel data, to compress video information. '338 Patent at 1:64-2:3. In the coding process, the residual information is subjected to a spectral transform function, such as a discrete cosine transform, to generate transform coefficients. '338 Patent at 1:59-66, 2:4-6. The transform coefficients are then quantized and the result entropy coded as a block. '338 Patent at 1:59-64, 2:6-11. The quantized transform coefficients are broken down into different pieces of information for entropy coding, including the last significant coefficient position, indicating the last non-zero coefficient in the block, a significance map showing the positions in the block that contain non-

12

zero coefficients, and the signs and magnitudes of non-zero coefficients. '338 Patent at 2:12-21.

The encoding of these values typically makes up between 30 and 80% of the encoded data in a

video bitstream. '338 Patent at 2:21-23.

52.   In a CABAC system, the context for a bit is used to record the history of the bits

encoded using that context to determine the estimated probability of symbols. '338 Patent at 7:38-

42. Significance maps for 4x4 chroma or luma blocks cover 15 positions each (excluding the

bottom right position), each of which conventionally had its own context. '338 Patent at 2:24-30.

These 4x4 blocks are used for 8x8, 16x16, and 32x32 transform units with additional contexts used

in the partitioning of larger transform units, so that the encoder and decoder ultimately track and

use 88 distinct contexts. '338 Patent at 2:30-39. The updating, storing, and retrieval of these

contexts must be carried out at high computational speed. '338 Patent at 2:39-40.

53.   The invention of the '338 Patent improves the coding of significance maps by using

non-spatially-uniform partitioning of the significance map, providing some bit positions with their

own contexts and assigning two or more other bit positions to common contexts. '338 Patent at

3:8-13, 3:17-25, Fig. 4. This improved partitioning improves the operation of video coding

computers by focusing the expense associated with context adaptation on significance map

positions that benefit most from unshared contexts.

54.   The '338 Patent is not directed to an abstract idea or any patent-ineligible concept.

Instead, the '338 Patent is directed to novel and unconventional improvements to the process of

video coding. The '338 Patent provides improvements over prior video coding techniques as

described above that result in substantial benefits to video compression, video quality, and video

playback by improving the efficiency of signaling maps of significant coefficients for transform

blocks. These substantial benefits are enjoyed by TikTok's users when, for example, watching videos on TikTok's platform.

B.   U.S. Patent No. 9,008,184 ("the '184 Patent")

55.   The '184 Patent, entitled "Multiple sign bit hiding within a transform unit," issued on April 14, 2015, to inventors Jing Wang, Xiang Yu, and Dake He. The '184 Patent issued from U.S. Patent Application No. 13/354,465, filed on January 20, 2012. The '184 Patent expires on January 5, 2033. A true and correct copy of the '184 Patent is attached as Exhibit 4.

56.   The '184 Patent is not directed to an abstract idea or any patent-ineligible concept. Instead, as described below, the '184 Patent is directed to novel and unconventional improvements to the process of video coding. The '184 Patent provides improvements over prior video coding techniques that result in substantial benefits to video compression, video quality, and video playback, for example by improving the efficiency of the video coding process. These substantial benefits are enjoyed by TikTok's users when, for example, watching videos on TikTok's platform.

57.   The '184 Patent relates to "methods and encoders/decoders for encoding and decoding residual video data using sign bit hiding." '184 Patent at 2:41-43. During the coding process an "image or frame is divided into blocks, typically 4x4 or 8x8, and the blocks are spectrally transformed into coefficients, quantized, and entropy encoded." '184 Patent at 1:41-43. The encoder or decoder "may use multi-level significance maps for encoding significant-coefficient flags." '184 Patent at 2:43-45. These flags indicate "whether the corresponding position in the transform unit or the specified unit contains a non-zero coefficient or not." '184 Patent at 4:3-5. Each significant coefficient of the transform domain coefficients "has a sign bit indicating whether the level of that non-zero coefficient is negative or positive." '184 Patent at 7:43-45.

58.   Coding sign bits for each of the non-zero transform coefficients can take up a significant amount of data—often "30-80% of the encoded data in the bitstream." '184 Patent at

1:65-67. Sign bit hiding is a technique that seeks to reduce the amount of data involved in coding these sign bits where "the sign of the first coefficient in the transform unit is encoded by way of the parity of the sum of quantized coefficients in the transform unit." '184 Patent at 7:49-51.

59.   Previously, sign bit hiding was applied only to entire transform blocks. '184 Patent at 8:28-34. The inventors of the '184 Patent appreciated that larger transform blocks could be partitioned into "coefficient groups or 'sets of significant coefficient flags.'" '184 Patent at 7:60-62. The '184 Patent further improves sign bit hiding by applying sign hiding to sets of coefficients for a transform unit. In this way the transform unit "may be divided or partitioned into sets of non-zero coefficients and a sign bit may be hidden for each set of non-zero coefficients using the parity of the sum of non-zero coefficients in that set." '184 Patent at 8:29-32. This compounds the data saving benefits of sign hiding by applying the technique to two or more sets of coefficients.

C.   U.S. Patent No. 12,186,395 ("the '395 Patent")

60.   The '395 Patent, entitled "Multiple sign bit hiding within a transform unit," issued on January 7, 2025, to inventors Jing Wang, Xiang Yu, and Dake He. The '395 Patent issued from U.S. Patent Application No. 18/201,171, filed on May 23, 2023. The '395 Patent is a continuation of U.S. Patent Application No. 16/989,674, filed on August 10, 2020 (now U.S. Patent No. 11,786,596), which is a continuation of U.S. Patent Application No. 15/894,085, filed on February 12, 2018 (now U.S. Patent No. 10,743,028), which is a continuation of U.S. Patent Application No. 14/682,462, filed on Apr. 9, 2015 (now U.S. Patent No. 9,900,622), which is a continuation of U.S. Patent Application No. 13/354,465, filed on January 20, 2012 (now U.S. Patent No. 9,008,184). The '395 Patent expires on January 20, 2032. A true and correct copy of the '395 Patent is attached as Exhibit 6.

61.   The '395 Patent is not directed to an abstract idea or any patent-ineligible concept. Instead, as explained below, the '395 Patent is directed to novel and unconventional improvements

15

to the process of video coding. The '395 Patent provides improvements over prior video coding techniques that result in substantial benefits to video compression, video quality, and video playback, for example by improving the efficiency of the video coding process. These substantial benefits are enjoyed by TikTok's users when, for example, watching videos on TikTok's platform.

62.   The specification of the '395 Patent claims priority to the '184 Patent and its specification substantially overlaps with that of the '184 Patent. The '395 Patent also relates to "methods and encoders/decoders for encoding and decoding residual video data using sign bit hiding." '395 Patent at 2:45-47. The '395 Patent similarly relates to the benefits of applying sign hiding to sets of coefficients for transform unit. '395 Patent at 8:55-61. The '395 Patent further improves upon sign bit hiding, for example, by only using sign bit hiding for a given subset of coefficients when that subset has more than a threshold number of coefficients between a first non-zero coefficient and a last non-zero coefficient. '395 Patent at 9:18-25. As an example, for each set of coefficients "the number of coefficients between the first and last non-zero coefficient (or the number of non-zero coefficients, or the cumulative total value of those coefficients) is tested against the threshold to determine whether to hide a sign bit for that set." '395 Patent at 9:42-46. In this way, the '395 Patent allows for greater efficiency and flexibility by only using sign bit hiding in cases that will lead to significant data savings.

D.   U.S. Patent No. 8,964,849 ("the '849 Patent")

63.   Velos owns by assignment the entire right, title, and interest in and to the '849 Patent, entitled "Multi-level significance maps for encoding and decoding," issued on February 24, 2015, to inventors Nguyen Nguyen, Tianying Ji, and Dake He. The '849 Patent issued from U.S. Patent Application No. 13/286,336, filed on November 1, 2011. The '849 Patent expires on September 20, 2032. A true and correct copy of the '849 Patent is attached as Exhibit 8.

64.   The '849 Patent is not directed to an abstract idea or any patent-ineligible concept. Instead, as explained below, the '849 Patent is directed to novel and unconventional improvements to the decoding of transform coefficient data in the field of digital video coding. The '849 Patent provides improvements over prior techniques that result in substantial benefits to motion prediction, video compression, video quality, and video playback. These substantial benefits are enjoyed by TikTok's users when, for example, watching videos on TikTok's platform.

65.   Between 30% and 80% of encoded data in video bitstreams is used to encode quantized transform coefficients. '849 Patent at 1:65-67. "In many cases, the data being transformed is not the actual pixel data, but is residual data following a prediction operation." '849 Patent at 1:42-44. In these cases, the quantized transform coefficients are used to represent residual data that can be combined with intra or inter predictions to arrive reconstructed video data for display. *See* '849 Patent at 7:4-27.

66.   Transform coefficients are organized into blocks and broken down into several pieces for encoding, including a last significant coefficient position indicating the location of the last non-zero coefficient in the block, a significance map indicating the positions of non-zero transform coefficients in the block, and the magnitudes and signs of the coefficients. '849 Patent at 1:56-65. The significance map is coded by significant coefficient flags reconstructed from the bitstream, which are typically coded using significant_coeff_flag syntax elements included in the bitstream. '849 Patent at Abstract. The '849 Patent reduces the signaling of significance maps by allowing significance flags to be inferred by a decoder rather than signaled or received under certain circumstances. '849 Patent at 18:11-19:24. As a result, the '849 Patent enables decoding of high quality video using less data.

17

E.   U.S. Patent No. 12,088,843 ("the '843 Patent")

67.   The '843 Patent, entitled "Method for deriving a motion vector," issued on September 10, 2024, to inventor Christopher A. Segall. The '843 Patent issued from U.S. Patent Application No. 18/371,014, filed on September 21, 2023. The '843 Patent is a continuation of U.S. Patent Application No. 17/825,947, filed on May 26, 2022 (now U.S. Patent No. 11,800,150), which is a continuation of U.S. Patent Application No. 17/013,779, filed on September 7, 2020 (now U.S. Patent No. 11,350,129), which is a continuation of U.S. Patent Application No. 16/544,858, filed on August 19, 2019 (now U.S. Patent No. 10,771,816), which is a continuation of U.S. Patent Application No. 15/650,565, filed on July 14, 2017 (now U.S. Patent No. 10,397,613), which is a continuation of U.S. Patent Application No. 13/101,451, filed on May 5, 2011 (now U.S. Patent No. 9,749,657), which claims priority to U.S. Provisional Application No. 61/435,243, filed on January 21, 2011. The '843 Patent expires on May 5, 2031. A true and correct copy of the '843 Patent is attached as Exhibit 10.

68.   The '843 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, as explained below, the '843 Patent is directed to novel and unconventional improvements to motion-compensated prediction in the field of digital video coding. The '843 Patent provides improvements over prior motion compensated prediction and video compression techniques that result in substantial benefits to motion prediction, video compression, video quality, and video playback. These substantial benefits are enjoyed by TikTok's users when, for example, watching videos on TikTok's platform.

69.   The '843 Patent "relates to image decoding using buffer compression for motion vector competition. Ex. 10 at 1:22-23. In video coding "[i]nter-picture prediction is performed from region(s) of already decoded pictures stored in the reference picture buffer." '843 Patent at 2:8-10. When performing inter-picture prediction, a "reference area is selected by specifying a

18

motion vector displacement and a reference picture index which may generally be referred to [] as a motion vector." '843 Patent at 2:14-17. One issue in motion vector prediction is efficiently determining a list of motion vectors, as including too many candidate motion vectors results in increased memory requirements, where too few candidates leads to unreliable predictions. '843 Patent at 36-38. The '843 Patent addresses this problem through techniques where candidate motion vectors are determined based on the candidate motion vectors of a co-located block. '843 Patent at 4:15-20. The '843 Patent's techniques help to reduce complexity and storage requirement by relying on previous lists of candidate motion vectors, while still maintaining reliability of the candidates by using motion vector candidates from a co-located block. '843 Patent at 60-67.

F.   U.S. Patent No. 12,341,962 ("the '962 Patent")

70.   Velos owns by assignment the entire right, title, and interest in and to the '962 Patent, entitled "Multi-level significance maps for encoding and decoding," issued on June 24, 2025, to inventors Nguyen Nguyen, Tianying Ji, and Dake He. The '962 Patent issued from U.S. Patent Application No. 17,888,377, filed on August 15, 2022, which is a continuation of a U.S. Patent Application No. 17/164,766 filed on February 1, 2021, which is a continuation of U.S. Patent Application No. 16/865,272 filed on May 1, 2020, now U.S. Patent No. 10,911,758, which is a continuation of U.S. Patent Application No. 16/226,870 filed on December 20, 2018, now U.S. Patent No. 10,659,782, which is a continuation of U.S. Patent Application No. 15/884,535 filed on January 31, 2018, now U.S. Pat. No. 10,205,945, which is a continuation of U.S. Patent Application No. 14/621,552 filed on February 13, 2015, now U.S. Patent No. 9,900,597, which is a continuation of U.S. Patent Application No. 13/286,336 filed on November 1, 2011, now U.S. Patent No. 8,964,849. A true and correct copy of the '962 Patent is attached as Exhibit 12.

71.   The '962 Patent is not directed to merely an abstract idea or any patent-ineligible concept. Instead, the '962 Patent is directed to novel and unconventional improvements to the

encoding of transform coefficients comprising residual information to, for example, enhance motion compensated predictions in the field of digital video coding. The '962 Patent provides improvements over prior video compression techniques that result in substantial benefits to motion prediction, video compression, video quality, and video playback. These substantial benefits are enjoyed by TikTok's users when, for example, watching videos on TikTok's platform.

72.   The specification of the '962 Patent claims priority to the '849 Patent and its specification substantially overlaps with that of the '849 Patent described above. The '962 Patent improves video encoding by more efficiently representing transform coefficient information. For example, the '962 Patent provides better ways of encoding the values of significant-coefficient flags within groups of significant-coefficient flags corresponding to blocks comprising transform units. The '962 Patent describes ways in which an encoder is able to reduce the amount of data necessary to signal transform information (which can be used as residual data with which to reconstruct pictures from predictions such as motion compensated predictions). For example, the '962 Patent describes ways in which significant-coefficient flags, each corresponding to a transform coefficient within a block in a transform unit, can be grouped for encoding purposes. Further, the '962 Patent describes how an encoder may use indirect signaling to convey either a "group flag" corresponding to a group of significant-coefficient flags or, in some cases, particular significant-coefficient flags corresponding to a transform coefficient. By reducing the amount of data needed to send transform information, which is necessary for high-quality reconstructed video data, the '962 Patent for example enables higher quality video to be sent using less bandwidth than before.

COUNT I: PATENT INFRINGEMENT OF THE '338 PATENT

73.   Velos incorporates by reference the preceding paragraphs as though fully set forth herein.

20

74.   TikTok has had knowledge and notice of the '338 Patent and its infringement thereof since at least as of the date this lawsuit was filed and/or the date this Original Complaint was served upon TikTok.

75.   TikTok infringes the '338 Patent by making, using, selling, offering for sale, and/or importing into the United States products, apparatuses, and/or methods covered by one or more claims of the '338 Patent. For example, TikTok makes and uses decoders and encoders used in transcoding of uploaded videos and encoding of videos. Additionally, TikTok distributes, sells, offers for sale, and/or imports the decoders and encoders included, on information and belief, in the TikTok application.

76.   TikTok makes, uses, sells, offers for sale, and/or imports the Accused Instrumentalities in this District and elsewhere in the United States, and thus directly infringes the '338 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

77.   TikTok also indirectly infringes the '338 Patent by way of induced infringement, literally or under the doctrine of equivalents in violation of 35 U.S.C. § 271(b), by inducing infringement by others, such as TikTok's customers and end-users, in this District and elsewhere in the United States. TikTok's customers and end-users directly infringe through their use of the inventions claimed in the '338 Patent when using the encoders or decoders included in the TikTok application. TikTok induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the TikTok application, and providing instructions, encouragement, documentation, and other information to customers and end-users suggesting they use the TikTok application in an infringing manner. As a result of TikTok's inducement, TikTok's customers and end-users use the TikTok application in the way TikTok intends and directly infringe the '338 Patent. TikTok has performed and continues to perform these

affirmative acts with knowledge of the '338 Patent and with the intent, or willful blindness, that

the induced acts directly infringe the '338 Patent.

78.   TikTok encourages users to "Get [the] App."[3] TikTok encourages and instructs

users of the TikTok application to playback video and record video using the application, which

results in the infringement of the '338 Patent.
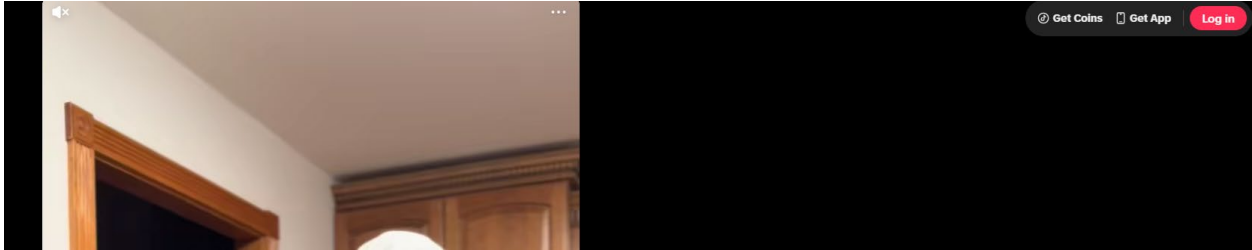
79.   TikTok further instructs users how to optimize video playback using the TikTok

application.[4] As another example, TikTok has a Creator Academy and Rewards Program[5] that

encourage users ("creators") to record, upload, and promote videos. Additionally, TikTok

encourages users to playback video content from TikTok-employed content providers and others.[6]

80.   TikTok encourages and instructs users to use the TikTok application for encoding

and decoding. For example, TikTok instructs people to "record … videos" on the application.

---

[3] https://www.tiktok.com/en/

[4]   https://www.tiktok.com/live/studio/help/article/Enhance-visuals/Adjust-LIVE-quality-for-smooth-and-clear-video?lang=en

[5] https://www.tiktok.com/creator-academy/;   https://support.tiktok.com/en/business-and-creator/creator-rewards-program/creator-rewards-program

[6] https://www.tiktok.com/@tiktokcreators?_t=ZT-8xSe7l78EFa&_r=1
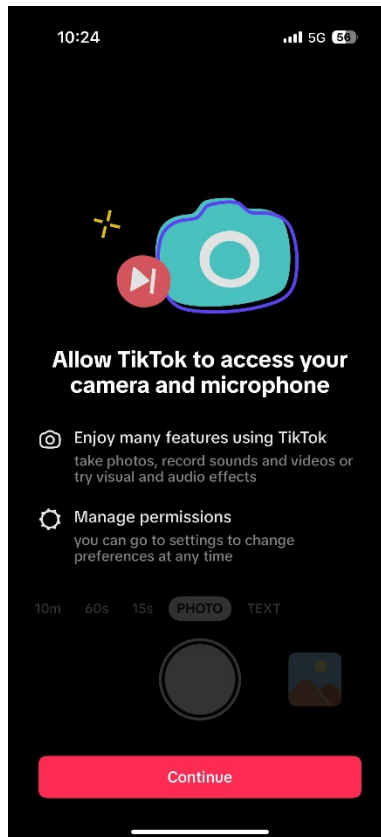
81.   Upon information and belief, TikTok derives revenue, directly and indirectly, from the activities relating to the Accused Instrumentalities, including their importation, testing, manufacture, use, sale, and offer for sale.

82.   TikTok's infringement of the '338 Patent has damaged and will continue to damage Velos.

83.   A claim chart that applies claim 1 of the '338 Patent to the Accused Products is attached as Exhibit 3. The H.265 Standard referenced in the claim chart is attached as Exhibit 1.

COUNT II: PATENT INFRINGEMENT OF THE '184 PATENT

84.   Velos incorporates by reference the preceding paragraphs as though fully set forth herein.

85.   TikTok has had knowledge and notice of the '184 Patent and its infringement thereof since at least as of the date this lawsuit was filed and/or the date this Original Complaint was served upon TikTok.

86.   TikTok infringes the '184 Patent by making, using, selling, offering for sale, and/or importing into the United States products, apparatuses, and/or methods covered by one or more claims of the '184 Patent. For example, TikTok makes and uses decoders and encoders used in transcoding of uploaded videos and encoding of videos. Additionally, TikTok distributes, sells, offers for sale, and/or imports the decoders and encoders included, on information and belief, in the TikTok application.

87.   TikTok makes, uses, sells, offers for sale, and/or imports the Accused Instrumentalities in this District and elsewhere in the United States, and thus directly infringes the '184 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

88.   TikTok also indirectly infringes the '184 Patent by way of induced infringement, literally or under the doctrine of equivalents in violation of 35 U.S.C. § 271(b), by inducing infringement by others, such as TikTok's customers and end-users, in this District and elsewhere in the United States. TikTok's customers and end-users directly infringe through their use of the inventions claimed in the '184 Patent when using the encoders or decoders included in the TikTok application. TikTok induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the TikTok application, and providing instructions, encouragement, documentation, and other information to customers and end-users suggesting they use the TikTok application in an infringing manner. As a result of TikTok's inducement, TikTok's customers and end-users use the TikTok application in the way TikTok intends and directly infringe the '184 Patent. TikTok has performed and continues to perform these

24

affirmative acts with knowledge of the '184 Patent and with the intent, or willful blindness, that

the induced acts directly infringe the '184 Patent.

89.   TikTok encourages users to "Get [the] App."[7] TikTok encourages and instructs

users of the TikTok application to playback video and record video using the application, which

results in the infringement of the '184 Patent.
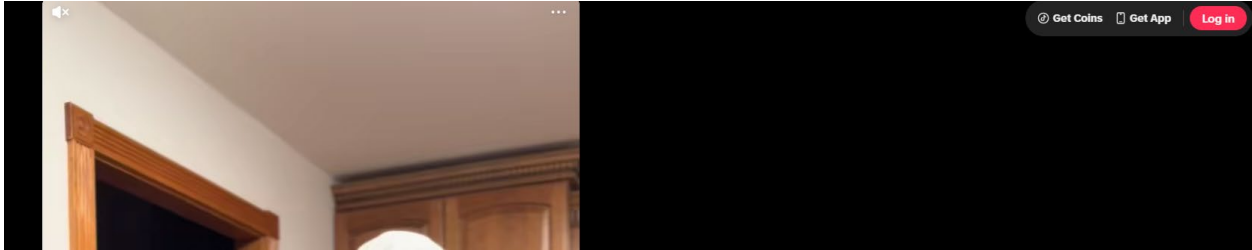
90.   TikTok further instructs users how to optimize video playback using the TikTok

application.[8] As another example, TikTok has a Creator Academy and Rewards Program[9] that

encourage users ("creators") to record, upload, and promote videos. Additionally, TikTok

encourages users to playback video content from TikTok-employed content providers and others.[10]

91.   TikTok encourages and instructs users to use the TikTok application for encoding

and decoding. For example, TikTok instructs people to "record … videos" on the application.

---

[7] https://www.tiktok.com/en/

[8]   https://www.tiktok.com/live/studio/help/article/Enhance-visuals/Adjust-LIVE-quality-for-smooth-and-clear-video?lang=en

[9]   https://www.tiktok.com/creator-academy/;   https://support.tiktok.com/en/business-and-creator/creator-rewards-program/creator-rewards-program

[10] https://www.tiktok.com/@tiktokcreators?_t=ZT-8xSe7l78EFa&_r=1
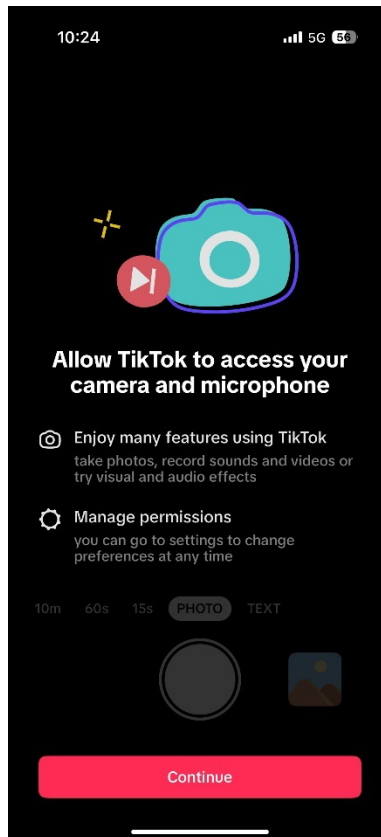
92.   Upon information and belief, TikTok derives revenue, directly and indirectly, from the activities relating to the Accused Instrumentalities, including their importation, testing, manufacture, use, sale, and offer for sale.

93.   TikTok's infringement of the '184 Patent has damaged and will continue to damage Velos.

94.   A claim chart that applies claim 1 of the '184 Patent to the Accused Products is attached as Exhibit 5. The H.265 Standard referenced in the claim chart is attached as Exhibit 1.

COUNT III: PATENT INFRINGEMENT OF THE '395 PATENT

95.   Velos incorporates by reference the preceding paragraphs as though fully set forth herein.

96.   TikTok has had knowledge and notice of the '395 Patent and its infringement thereof since at least as of the date this lawsuit was filed and/or the date this Original Complaint was served upon TikTok.

97.   TikTok infringes the '395 Patent by making, using, selling, offering for sale, and/or importing into the United States products, apparatuses, and/or methods covered by one or more claims of the '395 Patent. For example, TikTok makes and uses decoders and encoders used in transcoding of uploaded videos and encoding of videos. Additionally, TikTok distributes, sells, offers for sale, and/or imports the decoders and encoders included, on information and belief, in the TikTok application.

98.   TikTok makes, uses, sells, offers for sale, and/or imports the Accused Instrumentalities in this District and elsewhere in the United States, and thus directly infringes the '395 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

99.   TikTok also indirectly infringes the '395 Patent by way of induced infringement, literally or under the doctrine of equivalents in violation of 35 U.S.C. § 271(b), by inducing infringement by others, such as TikTok's customers and end-users, in this District and elsewhere in the United States. TikTok's customers and end-users directly infringe through their use of the inventions claimed in the '395 Patent when using the encoders or decoders included in the TikTok application. TikTok induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the TikTok application, and providing instructions, encouragement, documentation, and other information to customers and end-users suggesting they use the TikTok application in an infringing manner. As a result of TikTok's inducement, TikTok's customers and end-users use the TikTok application in the way TikTok intends and directly infringe the '395 Patent. TikTok has performed and continues to perform these

27

affirmative acts with knowledge of the '395 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '395 Patent.

100. TikTok encourages users to "Get [the] App."[11] TikTok encourages and instructs users of the TikTok application to playback video and record video using the application, which results in the infringement of the '395 Patent.
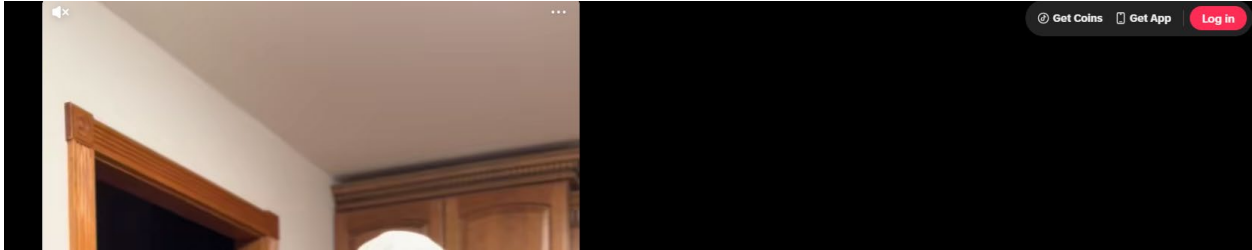
101. TikTok further instructs users how to optimize video playback using the TikTok application.[12] As another example, TikTok has a Creator Academy and Rewards Program[13] that encourage users ("creators") to record, upload, and promote videos. Additionally, TikTok encourages users to playback video content from TikTok-employed content providers and others.[14]
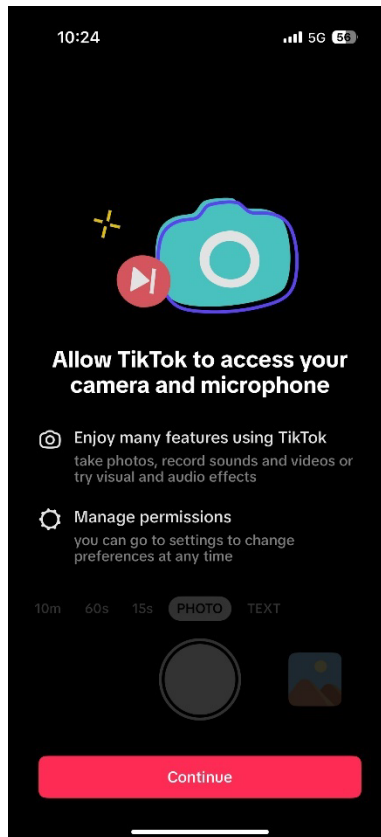
102. TikTok encourages and instructs users to use the TikTok application for encoding and decoding. For example, TikTok instructs people to "record … videos" on the application.

---

[11] https://www.tiktok.com/en/

[12]   https://www.tiktok.com/live/studio/help/article/Enhance-visuals/Adjust-LIVE-quality-for-smooth-and-clear-video?lang=en

[13] https://www.tiktok.com/creator-academy/; https://support.tiktok.com/en/business-and-creator/creator-rewards-program/creator-rewards-program

[14] https://www.tiktok.com/@tiktokcreators?_t=ZT-8xSe7l78EFa&_r=1

103.   Upon information and belief, TikTok derives revenue, directly and indirectly, from the activities relating to the Accused Instrumentalities, including their importation, testing, manufacture, use, sale, and offer for sale.

104.   TikTok's infringement of the '395 Patent has damaged and will continue to damage Velos.

105.   A claim chart that applies claim 5 of the '395 Patent to the Accused Products is attached as Exhibit 7. The H.265 Standard referenced in the claim chart is attached as Exhibit 1.

COUNT IV: PATENT INFRINGEMENT OF THE '849 PATENT

106.   Velos incorporates by reference the preceding paragraphs as though fully set forth herein.

107. TikTok has had knowledge and notice of the '849 Patent and its infringement thereof since at least as of the date this lawsuit was filed and/or the date this Original Complaint was served upon TikTok.

108. TikTok infringes the '849 Patent by making, using, selling, offering for sale, and/or importing into the United States products, apparatuses, and/or methods covered by one or more claims of the '849 Patent. For example, TikTok makes and uses decoders used in transcoding of uploaded videos. Additionally, TikTok distributes, sells, offers for sale, and/or imports the decoders included, on information and belief, in the TikTok application.

109. TikTok makes, uses, sells, offers for sale, and/or imports the Accused Instrumentalities in this District and elsewhere in the United States, and thus directly infringes the '849 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

110. TikTok also indirectly infringes the '849 Patent by way of induced infringement, literally or under the doctrine of equivalents in violation of 35 U.S.C. § 271(b), by inducing infringement by others, such as TikTok's customers and end-users, in this District and elsewhere in the United States. TikTok's customers and end-users directly infringe through their use of the inventions claimed in the '849 Patent when using the decoders included in the TikTok application. TikTok induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the TikTok application, and providing instructions, encouragement, documentation, and other information to customers and end-users suggesting they use the TikTok application in an infringing manner. As a result of TikTok's inducement, TikTok's customers and end-users use the TikTok application in the way TikTok intends and directly infringe the '849 Patent. TikTok has performed and continues to perform these affirmative acts

with knowledge of the '849 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '849 Patent.

111.   TikTok encourages users to "Get [the] App."[15] TikTok encourages and instructs users of the TikTok application to playback video using the application, which results in the infringement of the '849 Patent.
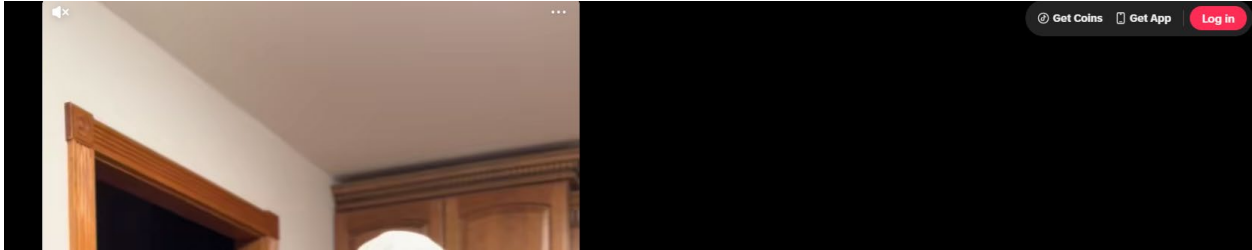
112.   TikTok further instructs users how to optimize video playback using the TikTok application.[16] As another example, TikTok has a Creator Academy and Rewards Program[17] that encourage users ("creators") to record, upload, and promote videos for others to playback. Additionally, TikTok encourages users to playback video content from TikTok-employed content providers and others.[18]
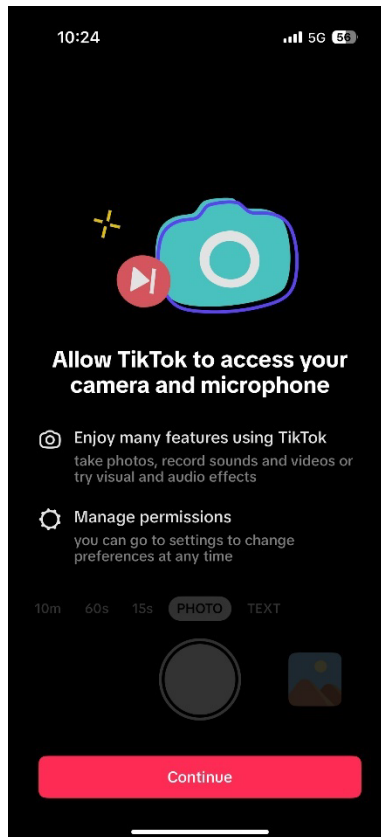
113.   TikTok encourages and instructs users to use the TikTok application for encoding and decoding. For example, TikTok instructs people to "record … videos" on the application so that others can play these videos back.

---

[15] https://www.tiktok.com/en/

[16]   https://www.tiktok.com/live/studio/help/article/Enhance-visuals/Adjust-LIVE-quality-for-smooth-and-clear-video?lang=en

[17] https://www.tiktok.com/creator-academy/;   https://support.tiktok.com/en/business-and-creator/creator-rewards-program/creator-rewards-program

[18] https://www.tiktok.com/@tiktokcreators?_t=ZT-8xSe7l78EFa&_r=1

114.   Upon information and belief, TikTok derives revenue, directly and indirectly, from the activities relating to the Accused Instrumentalities, including their importation, testing, manufacture, use, sale, and offer for sale.

115.   TikTok's infringement of the '849 Patent has damaged and will continue to damage Velos.

116.   TikTok's infringement of the '849 Patent has damaged and will continue to damage Velos.

117.   A claim chart that applies claim 1 of the '849 Patent to the Accused Products is attached as Exhibit 9. The H.265 Standard referenced in the claim chart is attached as Exhibit 1.

COUNT V: PATENT INFRINGEMENT OF THE '843 PATENT

118.   Velos incorporates by reference the preceding paragraphs as though fully set forth herein.

119.   TikTok has had knowledge and notice of the '843 Patent and its infringement thereof since at least as of the date this lawsuit was filed and/or the date this Original Complaint was served upon TikTok.

120.   TikTok infringes the '843 Patent by making, using, selling, offering for sale, and/or importing into the United States products, apparatuses, and/or methods covered by one or more claims of the '843 Patent. For example, TikTok makes and uses decoders and encoders used in transcoding of uploaded videos and encoding of videos. Additionally, TikTok distributes, sells, offers for sale, and/or imports the decoders and encoders included, on information and belief, in the TikTok application.

121.   TikTok makes, uses, sells, offers for sale, and/or imports the Accused Instrumentalities in this District and elsewhere in the United States, and thus directly infringes the '843 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

122.   TikTok also indirectly infringes the '843 Patent by way of induced infringement, literally or under the doctrine of equivalents in violation of 35 U.S.C. § 271(b), by inducing infringement by others, such as TikTok's customers and end-users, in this District and elsewhere in the United States. TikTok's customers and end-users directly infringe through their use of the inventions claimed in the '843 Patent when using the encoders or decoders included in the TikTok application. TikTok induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the TikTok application, and providing instructions, encouragement, documentation, and other information to customers and end-users suggesting they use the TikTok application in an infringing manner. As a result of TikTok's inducement, TikTok's customers and end-users use the TikTok application in the way TikTok intends and directly infringe the '843 Patent. TikTok has performed and continues to perform these

affirmative acts with knowledge of the '843 Patent and with the intent, or willful blindness, that

the induced acts directly infringe the '843 Patent.

123.   TikTok encourages users to "Get [the] App."[19] TikTok encourages and instructs

users of the TikTok application to playback video and record video using the application, which

results in the infringement of the '843 Patent.
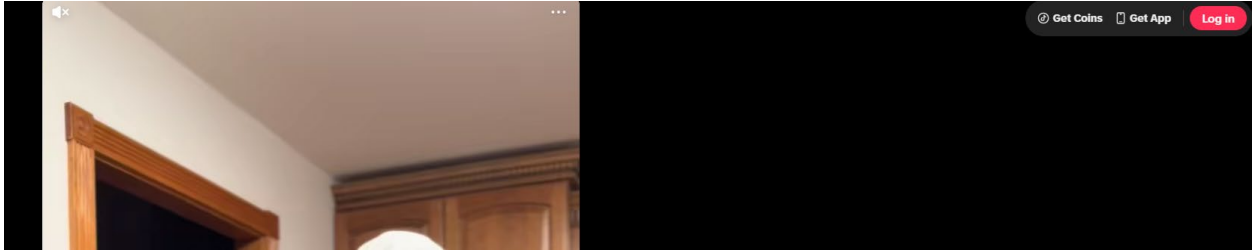
124.   TikTok further instructs users how to optimize video playback using the TikTok

application.[20] As another example, TikTok has a Creator Academy and Rewards Program[21] that

encourage users ("creators") to record, upload, and promote videos. Additionally, TikTok

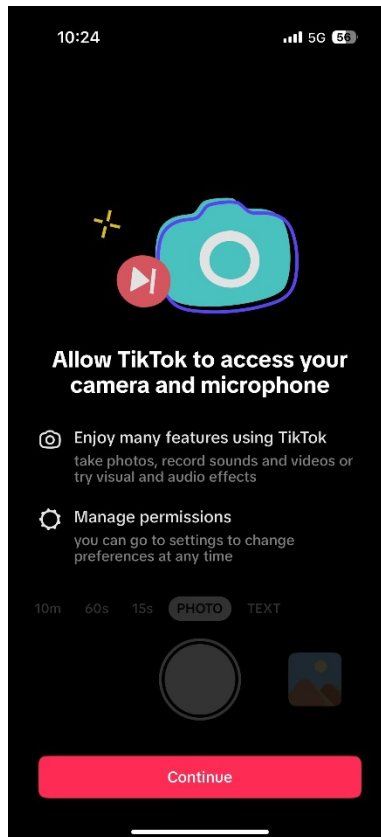encourages users to playback video content from TikTok-employed content providers and others.[22]

125.   TikTok encourages and instructs users to use the TikTok application for encoding

and decoding. For example, TikTok instructs people to "record … videos" on the application.

---

[19] https://www.tiktok.com/en/

[20]   https://www.tiktok.com/live/studio/help/article/Enhance-visuals/Adjust-LIVE-quality-for-smooth-and-clear-video?lang=en

[21] https://www.tiktok.com/creator-academy/;   https://support.tiktok.com/en/business-and-creator/creator-rewards-program/creator-rewards-program

[22] https://www.tiktok.com/@tiktokcreators?_t=ZT-8xSe7l78EFa&_r=1

126.   Upon information and belief, TikTok derives revenue, directly and indirectly, from the activities relating to the Accused Instrumentalities, including their importation, testing, manufacture, use, sale, and offer for sale.

127.   TikTok's infringement of the '843 Patent has damaged and will continue to damage Velos.

128.   A claim chart that applies claim 1 of the '843 Patent to the Accused Products is attached as Exhibit 11. The H.265 Standard referenced in the claim chart is attached as Exhibit 1.

COUNT VI: PATENT INFRINGEMENT OF THE '962 PATENT

129.   Velos incorporates by reference the preceding paragraphs as though fully set forth herein.

130.   TikTok has had knowledge and notice of the '962 Patent and its infringement thereof since at least as of the date this lawsuit was filed and/or the date this Original Complaint was served upon TikTok.

131.   TikTok infringes the '962 Patent by making, using, selling, offering for sale, and/or importing into the United States products, apparatuses, and/or methods covered by one or more claims of the '962 Patent. For example, TikTok makes and uses encoders used in transcoding of uploaded videos and encoding of videos. Additionally, TikTok distributes, sells, offers for sale, and/or imports the encoders included, on information and belief, in the TikTok application.

132.   TikTok makes, uses, sells, offers for sale, and/or imports the Accused Instrumentalities in this District and elsewhere in the United States, and thus directly infringes the '962 Patent literally and/or under the Doctrine of Equivalents, in violation of 35 U.S.C. § 271.

133.   TikTok also indirectly infringes the '962 Patent by way of induced infringement, literally or under the doctrine of equivalents in violation of 35 U.S.C. § 271(b), by inducing infringement by others, such as TikTok's customers and end-users, in this District and elsewhere in the United States. TikTok's customers and end-users directly infringe through their use of the inventions claimed in the '962 Patent when using the encoders included in the TikTok application. TikTok induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the TikTok application, and providing instructions, encouragement, documentation, and other information to customers and end-users suggesting they use the TikTok application in an infringing manner. As a result of TikTok's inducement, TikTok's customers and end-users use the TikTok application in the way TikTok intends and directly infringe the '962 Patent. TikTok has performed and continues to perform these affirmative acts

with knowledge of the '962 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '962 Patent.

134. TikTok encourages users to "Get [the] App."[23] TikTok encourages and instructs users of the TikTok application to record video using the application, which results in the infringement of the '962 Patent.
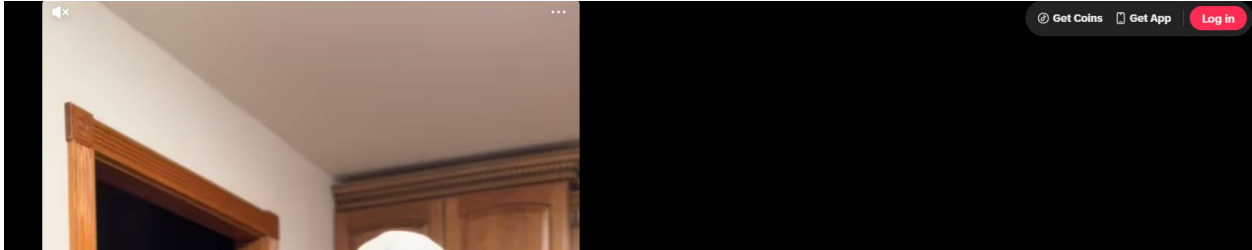
135. TikTok further instructs users how to optimize video playback using the TikTok application.[24] As another example, TikTok has a Creator Academy and Rewards Program[25] that encourage users ("creators") to record, upload, and promote videos. Additionally, TikTok encourages users to playback video content from TikTok-employed content providers and others.[26]
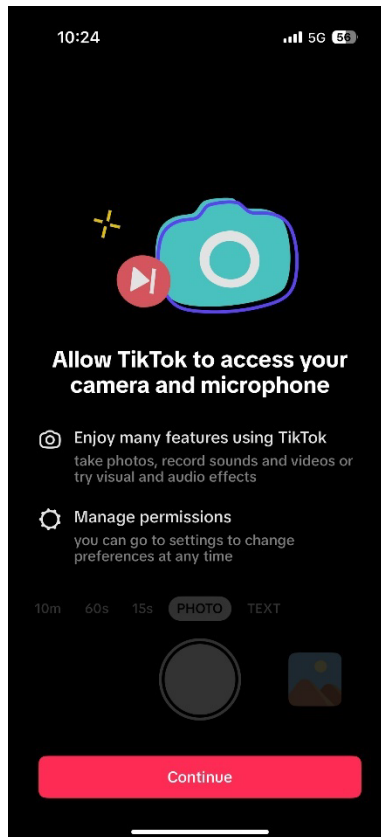
136. TikTok encourages and instructs users to use the TikTok application for encoding and decoding. For example, TikTok instructs people to "record … videos" on the application.

---

[23] https://www.tiktok.com/en/

[24]   https://www.tiktok.com/live/studio/help/article/Enhance-visuals/Adjust-LIVE-quality-for-smooth-and-clear-video?lang=en

[25] https://www.tiktok.com/creator-academy/;   https://support.tiktok.com/en/business-and-creator/creator-rewards-program/creator-rewards-program

[26] https://www.tiktok.com/@tiktokcreators?_t=ZT-8xSe7l78EFa&_r=1

137.   Upon information and belief, TikTok derives revenue, directly and indirectly, from the activities relating to the Accused Instrumentalities, including their importation, testing, manufacture, use, sale, and offer for sale.

138.   TikTok's infringement of the '962 Patent has damaged and will continue to damage Velos.

139.   A claim chart that applies claim 1 of the '962 Patent to the Accused Products is attached as Exhibit 13. The H.265 Standard referenced in the claim chart is attached as Exhibit 1.

COUNT VII: DECLARATORY JUDGMENT THAT VELOS HAS NEGOTIATED IN GOOD FAITH TOWARD A LICENSE WITH TIKTOK AND COMPLIED WITH ITS RAND COMMITMENTS

140.   Velos incorporates by reference the preceding paragraphs as though fully set forth herein.

141.   TikTok designs, manufactures, uses, and markets products that utilize and comply with the one or more technical standards, such as the ITU H.265 Standard. TikTok requires a license to one or more of Velos' essential patent claims.

142.   Velos has voluntarily declared to ITU that it is prepared to grant licenses to its essential H.265 patent claims on a worldwide, non-discriminatory basis and on reasonable terms and conditions.

143.   Velos has at all times been prepared and willing to grant a license to TikTok under its essential patent claims on reasonable and non-discriminatory terms.

144.   Velos negotiated in good faith with TikTok.

145.   Velos attempted to engage in substantive licensing negotiations by offering to execute a reasonable non-disclosure agreement with TikTok.

146.   TikTok declined to enter into the non-disclosure agreement proposed by Velos.

147.   Instead, TikTok proposed onerous and unreasonable terms to the non-disclosure agreement that were unacceptable.

148.   TikTok has provided no indication that it is willing to take a license on RAND terms to Velos' video coding patents.

149.   Further, TikTok has engaged in discussions with Avanci Video, which acted on Velos' behalf.

150.   On information and belief, TikTok received an offer to take a license that would cover the Velos' video coding patents, including the Asserted Patents, on RAND terms and conditions.

151.   TikTok remains unlicensed to Velos' patents.

152. A dispute exists between Velos and TikTok concerning whether Velos has negotiated in good faith toward a license with TikTok and complied with the ITU Common Patent Policy and Velos' relevant Patent Statement and Licensing Declarations, as well as applicable laws. There is a case or controversy of sufficient immediacy, reality, and ripeness to warrant the issuance of a declaratory judgment.

153. Velos seeks a declaration that Velos has negotiated in good faith toward a license with TikTok and has complied with its obligations under the ITU Common Patent Policy and commitments under Velos' relevant Patent Statement and Licensing Declarations.

COUNT VIII: BREACH OF TIKTOK'S OBLIGATION TO NEGOTIATE IN GOOD FAITH TOWARD A LICENSE WITH VELOS

154. Velos incorporates by reference the preceding paragraphs as though fully set forth herein.

155. TikTok is obligated to negotiate in good faith with Velos toward concluding a license for Velos' patent claims essential to the H.265 Standard. TikTok has failed to negotiate in good faith with Velos and therefore breached its obligation, for the reasons provided in Count VII above. TikTok's conduct was unreasonable and did not reflect a sincere interest in timely concluding a license.

156. Velos has at all times been prepared and willing to grant a license to TikTok under its essential patent claims.

157. Velos negotiated in good faith with TikTok.

158. TikTok failed to negotiate in good faith, choosing instead to obstruct negotiations and avoid paying a RAND royalty.

159. There is a dispute between Velos and TikTok concerning whether TikTok has complied with its obligation to negotiate in good faith toward concluding a license to the essential

claims of the Asserted Patents. This controversy is of sufficient immediacy, reality, and ripeness to warrant the issuance of a declaratory judgment.

160.   Velos is entitled to a declaratory judgment that TikTok has not complied with its obligation to act in good faith during its negotiations with Velos, in regard to RAND terms for a license to the parties' essential patent claims, and as a consequence, that TikTok has repudiated and forfeited its ability to claim rights as a third-party beneficiary of Velos' RAND commitment to ITU to the extent applicable to the essential claims of Velos' patents.

161.   In addition to a declaration, Velos also requests an award of damages for the expenses it has incurred because of TikTok's failure to negotiate in good faith with Velos.

ATTORNEYS' FEES

162.   Velos is entitled to recover reasonable and necessary attorneys' fees under applicable law.

DEMAND FOR JURY TRIAL

163.   Velos hereby demands a jury trial for all issues so triable.

PRAYER FOR RELIEF

164.   WHEREFORE, Velos respectfully requests that this Court enter judgment in its favor as follows and afford Velos the following relief:

I.   adjudge and declare that TikTok infringes claims of the Asserted Patents;

II.   adjudge and declare that TikTok's infringement of claims of the Asserted Patents is willful;

III.   award Velos its actual damages;

IV.   award Velos enhanced damages pursuant to 35 U.S.C. § 284;

V.   award Velos pre-judgment and post-judgment interest to the full extent allowed under the law, as well as its costs;

VI.   adjudge and declare that this is an exceptional case and award Velos its reasonable attorneys' fees pursuant to 35 U.S.C. § 285;

VII.   order an accounting of damages for acts of infringement;

VIII.   adjudge and declare that Velos has negotiated in good faith toward concluding a license with TikTok and complied with its obligations under the relevant standard development organization IPR policies and commitments under Velos' relevant standard development organization declarations, as well as applicable laws;

IX.   adjudge and declare that TikTok failed to negotiate in good faith toward concluding a license with Velos, and has thus lost or forfeited its right to claim third-party beneficiary status, including under Velos' relevant ITU Patent Statement and Licensing Declarations to the extent applicable to the essential claims of the Asserted Patents;

X.   award Velos its costs of suit; and

XI.   award such other equitable relief which may be requested and to which Velos is entitled.

Dated: June 24, 2025

/s/ Warren H. Lipschitz
Warren H. Lipschitz
wlipschitz@mckoolsmith.com
Texas State Bar No. 24078867
Erik Fountain
efountain@mckoolsmith.com
Texas State Bar No. 24097701
Eric Hansen *(pro hac vice forthcoming)*
Texas State Bar No. 24062763
ehansen@mckoolsmith.com
MCKOOL SMITH, P.C.
300 Crescent Ct. Ste. 1200
Dallas, TX 75224
Telephone: (214) 978-4000
Facsimile: (214) 978-4044

R. Mitch Verboncoeur
mverboncoeur@mckoolsmith.com
Texas State Bar No. 24105732
MCKOOL SMITH, P.C.
303 Colorado St Suite 2100
Austin, TX 78701
Telephone: (512) 692-8700
Facsimile: (512) 692-8744

Samuel F. Baxter
Texas State Bar No. 01938000
sbaxter@mckoolsmith.com
Kevin Burgess
Texas State Bar No. 24006927
kburgess@mckoolsmith.com
Jennifer   Truelove   *(pro   hac   vice
forthcoming)*
Texas State Bar No. 24012906
jtruelove@mckoolsmith.com
MCKOOL SMITH, P.C.
104 East Houston Street, Suite 300
Marshall, TX 75670
Telephone: (903) 923-9000
Facsimile: (903) 923-9099

Attorneys for Plaintiff Velos Media, LLC

43